

## Staffing the Empirical Analysis of Verbal Behavior

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Empirical articles in *The Analysis of Verbal Behavior* were inspected to evaluate the contributions of new and repeat investigators. The journal has attracted a steady stream of new empirical authors from early in its history. In recent years, repeat authors have begun to have a substantial impact on the journal. These outcomes suggest a maturing research community and provide cause for optimism about the future of empirical verbal behavior research.

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Much has been written about the importance of generating research programs to support the conceptual analysis of verbal behavior (e.g., Hake, 1982; McPherson, Bonem, Green, & Osborne, 1984; Oah & Dickinson, 1989; Schlinger, 1998; Sundberg, 1991; see also Buskist & Miller, 1982; Dougherty, 1994; Dymond & Critchfield, in press). A recent analysis of publication trends in *The Analysis of Verbal Behavior* (TAVB), covering the years 1982 to 1998, showed that empirical analyses of verbal behavior were absent in the journal's first few years, but were consistently (if not always prominently) represented thereafter (Normand, Fossa, & Poling, 2000). Moreover, Normand et al. reported that empirical reports were especially numerous during 2 of the past 3 years (the exception, 1998, was essentially a special issue on future directions), raising hopes for a strong empirical presence in the study of verbal behavior.

Publication counts do not tell the entire story, however, and it is useful to try to understand the dynamics that underlie research productivity. For example, to develop a critical mass in its verbal community and to insure a steady supply of new ideas, a nascent research area must generate new inves-

tigators with some regularity. To achieve stability and longevity, a research area must also retain many of the investigators that it generates. How has the analysis of verbal behavior performed on these dimensions?

To find out, primary empirical reports published in TAVB were divided into intervals of approximately 4 years in duration: 1982–1987 (no empirical reports appeared before 1985), 1988–1991, 1992–1995, and 1996–1999. Within these intervals, articles were inspected to identify (a) new investigators (defined as first authors who had not appeared in the journal in any previous interval), and (b) repeat investigators (defined as those who had appeared previously in the journal in any authorship capacity). Definitions of new and repeat investigators were similar to those described in previous studies (Dunlap, Clarke, & Reyes, 1998; Dymond, Clarke, Dunlap, & Steiner, 2000; Dymond & Critchfield, in press).

Figure 1 summarizes the results in terms of the proportion of articles contributed by new and repeat investigators. Note that, because the categories are not mutually exclusive, the two proportions can sum to greater than 1.0; for example, an article with student as first author and faculty mentor as second author might qualify under both categories.

Logic suggests that in the years following a journal's inception, new investigators should dominate and repeat investigators should be rare, and Figure

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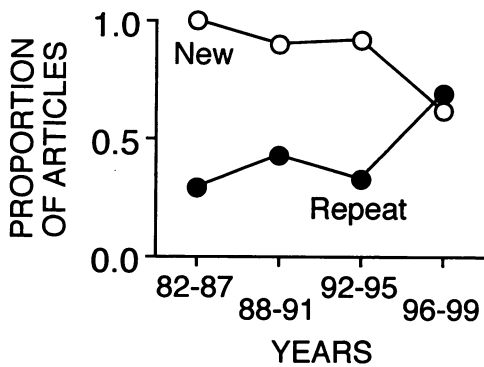


Fig. 1. Proportion of empirical articles in *The Analysis of Verbal Behavior* contributed by new first authors and repeat authors. See text for details.

1 shows these expected patterns. New authors of empirical reports appeared at a high relative rate during *TAVB*'s early years (initially, of course, all authors were new authors). The rate has dropped recently, but remains similar to that of new investigators in the *Journal of the Experimental Analysis of Behavior* (Dymond & Critchfield, in press), a journal that presumably represents a stable research community. It will be important for *TAVB* to sustain this influx of new authors in coming years.

The past few years also have witnessed an increase in the proportion of articles contributed by repeat authors. Although this outcome might reflect a general maturing of the verbal behavior research community, it could also imply the domination of the field by a relatively few investigators. For example, Dymond et al. (2000) reported that 37% of recent articles in the *Journal of Applied Behavior Analysis* (*JABA*) were contributed by authors with 10 or more *JABA* publications in the preceding decade. This outcome coincided with a sharp decline in the rate of *JABA* publication by new investigators. By contrast, during the most recent interval of the present census, only one author contributed more than a single *TAVB* article, and, as noted above, new authors continue to have a strong presence in the journal.

The most plausible conclusion is that the verbal behavior research community has had early success in developing and retaining investigators. These outcomes should lend enthusiasm to any appraisal of general publication trends as reported by Normand et al. (2000). These outcomes also provide a context in which to evaluate past surveys of the verbal behavior research database. Some reports have expressed criticism of, or discouragement concerning, the relatively small number of published studies, but the present data serve as a reminder that research cannot proceed without investigators. *TAVB* was published for well over a decade before it regularly began to attract repeat empirical contributors. It may take additional time for this pool of investigators to fully cohere as a scientific community.

Previous writers have identified at least three essential challenges that loom for the analysis of verbal behavior in the coming decade and beyond. First, much remains to be explored, empirically, in existing conceptual analyses of verbal behavior (Sundberg, 1991). Second, verbal behavior researchers must seek broader impact within behavior analysis. For example, no *TAVB* article appears among the 98 sources cited most often in the experimental analysis of human behavior during the 1990s (Critchfield et al., 2000). Third, verbal behavior researchers must seek broader influence outside of behavior analysis, including by addressing topics of interest to other psychologists (Catania & Shimoff, 1998). Now that a critical mass of investigators can be imagined, these challenges will seem less daunting.

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